

Attorney Docket No.: 028987.52608US
PATENT

CLAIMS:

1. A method of controlling handling of one of an all-wheel drive vehicle having at least one of a controllable longitudinal clutch and a controllable main-axle lateral lock and a single axle drive vehicle having a controllable lateral lock, said method comprising the steps of:

detecting at least the driving speed (v), the lateral acceleration (a_q) and the actual steering angle ($LW(akt)$);

providing a stored a filed characteristic diagram, which includes the driving speed (v) and the lateral acceleration (a_q) said diagram supplying a characteristic-diagram steering angle ($LW(KF)$) pertaining to the driving speed (v) and the lateral acceleration (a_q); and

changing the lateral acceleration (a_q) when a definable deviation (Δ) of the actual steering angle ($LW(act)$) from the characteristic-diagram steering angle ($LW(KF)$) is exceeded.

2. The method according to claim 1, wherein a changing lateral acceleration takes place by way of a change of said at least one of said longitudinal and said lateral lock.

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3. The method according to claim 2, wherein a change of control of said at least one of said longitudinal clutch and said lateral lock takes place in variable steps.

4. The method according to claim 1 wherein, a lateral control capacity changes by way of a reduction of locking torque, to thereby reduce understeering.

5. The method according claim 2 wherein, a lateral control capacity changes by way of a reduction of locking torque, to thereby reduce understeering.

6. The method according to claim 3 wherein, a lateral control capacity changes by way of a reduction of locking torque, to thereby reduce understeering.

7. A method of controlling handling of a vehicle, comprising the steps of:
detecting at least a driving speed, a lateral acceleration and an actual steering angle;

deriving a predicted steering angle from said detected driving speed and said lateral acceleration; and

modifying said detected lateral acceleration when a derivation between said actual steering angle and said predicted steering angle exceeds a predetermined

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value.

8. This method according to claim 7, wherein said vehicle is one of an all-wheel drive vehicle having at least one of a controllable clutch and a controllable main-axle and a single axle drive vehicle having a controllable lateral lock.

9. The method according to claim 8, wherein a changing lateral acceleration takes place by way of a change of said at least one of said longitudinal and said lateral lock.

10. The method according to claim 8, wherein change of control of said at least one of said longitudinal, clutch a lateral lock takes place in variable steps.

11. The method according to claim 8, wherein a lateral control capacity changes by way of a reduction of locking torque, to thereby reduce understeering.

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12. The method according to claim 9, wherein
a lateral control capacity changes by way of a reduction of locking torque, to
thereby reduce understeering.

13. The method according to claim 10, wherein
a lateral control capacity changes by way of a reduction of locking torque,
to thereby reduce understeering.